IN THE CLAIMS

Please amend the claims as follows:

Claims 1-7 (canceled)

Claim 8 (currently amended): A heat exchanger ~~according to claim 5~~ comprising:

a refrigerant inlet header having a refrigerant inlet and position in a downstream side of a direction of air flow;

a refrigerant outlet header positioned in an upstream side of the direction of air flow and having a refrigerant outlet; and

a refrigerant circulating passage for causing the inlet header to communicate with the outlet header therethrough, the circulating passage comprising at least two intermediate headers and a plurality of heat exchange tubes for causing the inlet header and the outlet header to communicate with all the intermediate headers therethrough, the intermediate headers including a refrigerant inflow intermediate header and a refrigerant outflow intermediate header juxtaposed in an upstream-downstream direction of air flow, the inflow intermediate header and the outflow intermediate header being held in communication at one end of inflow intermediate header,

wherein a heat exchange core comprises tube groups in a plurality of rows arranged in the upstream-downstream direction, each of the tube groups comprising the plurality of heat exchange tubes arranged at a spacing, the refrigerant inlet header positioned toward one end of each of the heat exchange tubes and having joined thereto the heat exchange tubes of one tube group of at least one row, the refrigerant outlet header positioned toward said one end of each heat exchange tube and having joined thereto the heat exchange tubes of the other tube group, the refrigerant inflow intermediate header positioned toward the other end of each heat exchange tube and having jointed thereto the heat exchange tubes joined to the inlet header, and the refrigerant outflow intermediate header positioned toward said other end of each heat

exchange tube and in the upstream side and having joined thereto the heat exchange tubes joined to the outlet header,

wherein the outflow intermediate header is provided in interior thereof with first flow dividing control means for causing a refrigerant to dividedly flow into the heat exchange tubes joined to the outflow intermediate header uniformly, the first flow dividing control means comprises a first flow dividing control wall having a plurality of refrigerant passing holes for dividing the interior of the outflow intermediate header into first and second spaces arranged one above the other, the inflow intermediate header and the first space of the outflow intermediate header being held in communication at one end of the inflow intermediate header header, and the heat exchange tubes joined to the outflow intermediate header communicate with the second space,

wherein the refrigerant passing holes formed in the first flow dividing control wall are arranged at a spacing longitudinally thereof, and the refrigerant passing holes are formed in a portion of the first flow dividing control to the [[rear] upstream side of a midportion thereof with respect to the ~~front-rear~~ upstream-downstream direction.

Claim 9 (canceled)

Claim 10 (currently amended): A heat exchanger ~~according to claim 9~~ comprising:

a refrigerant inlet header having a refrigerant inlet and position in a downstream side of a direction of air flow;

a refrigerant outlet header positioned in an upstream side of the direction of air flow and having a refrigerant outlet; and

a refrigerant circulating passage for causing the inlet header to communicate with the outlet header therethrough, the circulating passage comprising at least two intermediate headers and a plurality of heat exchange tubes for causing the inlet header and the outlet header to communicate with all the intermediate headers therethrough, the intermediate

headers including a refrigerant inflow intermediate header and a refrigerant outflow intermediate header juxtaposed in an upstream-downstream direction of air flow, the inflow intermediate header and the outflow intermediate header being held in communication at one end of inflow intermediate header,

wherein a heat exchange core comprises tube groups in a plurality of rows arranged in the upstream-downstream direction, each of the tube groups comprising the plurality of heat exchange tubes arranged at a spacing, the refrigerant inlet header positioned toward one end of each of the heat exchange tubes and having joined thereto the heat exchange tubes of one tube group of at least one row, the refrigerant outlet header positioned toward said one end of each heat exchange tube and having joined thereto the heat exchange tubes of the other tube group, the refrigerant inflow intermediate header positioned toward the other end of each heat exchange tube and having jointed thereto the heat exchange tubes joined to the inlet header, and the refrigerant outflow intermediate header positioned toward said other end of each heat exchange tube and in the upstream side and having joined thereto the heat exchange tubes joined to the outlet header,

wherein the outflow intermediate header is provided in interior thereof with first flow dividing control means for causing a refrigerant to dividedly flow into the heat exchange tubes joined to the outflow intermediate header uniformly, the first flow dividing control means comprises a first flow dividing control wall having a plurality of refrigerant passing holes for dividing the interior of the outflow intermediate header into first and second spaces arranged one above the other, the inflow intermediate header and the first space of the outflow intermediate header being held in communication at one end of the inflow intermediate header header, and the heat exchange tubes joined to the outflow intermediate header communicate with the second space,

wherein the inflow intermediate header and the outflow intermediate header are provided by dividing a refrigerant turn tank into a front and a rear portion by separating means, and the turn tank is provided at one end thereof with a communication member for holding the inflow intermediate header and the outflow intermediate header in communication therethrough.

Claim 11 (canceled)

Claim 12 (currently amended): A heat exchanger ~~according to claim 11~~ comprising:

a refrigerant inlet header having a refrigerant inlet and position in a downstream side of a direction of air flow;

a refrigerant outlet header positioned in an upstream side of the direction of air flow and having a refrigerant outlet; and

a refrigerant circulating passage for causing the inlet header to communicate with the outlet header therethrough, the circulating passage comprising at least two intermediate headers and a plurality of heat exchange tubes for causing the inlet header and the outlet header to communicate with all the intermediate headers therethrough, the intermediate headers including a refrigerant inflow intermediate header and a refrigerant outflow intermediate header juxtaposed in an upstream-downstream direction of air flow, the inflow intermediate header and the outflow intermediate header being held in communication at one end of inflow intermediate header,

wherein a heat exchange core comprises tube groups in a plurality of rows arranged in the upstream-downstream direction, each of the tube groups comprising the plurality of heat exchange tubes arranged at a spacing, the refrigerant inlet header positioned toward one end of each of the heat exchange tubes and having joined thereto the heat exchange tubes of one tube group of at least one row, the refrigerant outlet header positioned toward said one end of each heat exchange tube and having joined thereto the heat exchange tubes of the other tube

group, the refrigerant inflow intermediate header positioned toward the other end of each heat exchange tube and having jointed thereto the heat exchange tubes joined to the inlet header, and the refrigerant outflow intermediate header positioned toward said other end of each heat exchange tube and in the upstream side and having joined thereto the heat exchange tubes joined to the outlet header,

wherein the outflow intermediate header is provided in interior thereof with first flow dividing control means for causing a refrigerant to dividedly flow into the heat exchange tubes joined to the outflow intermediate header uniformly, the first flow dividing control means comprises a first flow dividing control wall having a plurality of refrigerant passing holes for dividing the interior of the outflow intermediate header into first and second spaces arranged one above the other, the inflow intermediate header and the first space of the outflow intermediate header being held in communication at one end of the inflow intermediate header header, and the heat exchange tubes joined to the outflow intermediate header communicate with the second space,

wherein the inflow intermediate header and the outflow intermediate header are provided by dividing a refrigerant turn tank into a front and a rear portion by separating means, and the turn tank comprises a first member having the heat exchange tubes joined thereto, a second member brazed to the first member at a portion thereof opposite to the heat exchange tubes, and two closing members brazed to respective opposite ends of the first and second members, the second member being integrally provided with the separating means and the first flow dividing control wall,

wherein one of the closing members has two through holes for respectively causing the inflow intermediate header and the first space of the outflow intermediate header in communication with the inflow intermediate header to communicate with outside

therethrough, and is provided with a communication member brazed to an outer side thereof for holding the two through holes in communication therethrough.

Claim 13 (original): A heat exchanger according to claim 12 wherein the closing member having the through holes is platelike and the communication member is a plate having the same shape and size as the platelike closing member when seen from one side, the communication member being provided with an outwardly bulging portion having an inside communication channel for holding the two through holes of the closing member in communication therethrough.

Claim 14 (original): A heat exchanger according to claim 13 wherein the closing member having the through holes comprises a main body having a contour shaped in conformity with the cross sectional contour of the turn tank and a protrusion projecting from the main body toward the inlet header and the outlet header, and the outwardly bulging portion of the communication member is formed in corresponding relation with the main body and the protrusion of the closing member.

Claims 15-16 (canceled)

Claim 17 (currently amended): A heat exchanger ~~according to claim 16~~ comprising:

a refrigerant inlet header having a refrigerant inlet and position in a downstream side of a direction of air flow;

a refrigerant outlet header positioned in an upstream side of the direction of air flow and having a refrigerant outlet; and

a refrigerant circulating passage for causing the inlet header to communicate with the outlet header therethrough, the circulating passage comprising at least two intermediate headers and a plurality of heat exchange tubes for causing the inlet header and the outlet header to communicate with all the intermediate headers therethrough, the intermediate headers including a refrigerant inflow intermediate header and a refrigerant outflow

intermediate header juxtaposed in an upstream-downstream direction of air flow, the inflow intermediate header and the outflow intermediate header being held in communication at one end of inflow intermediate header,

wherein a heat exchange core comprises tube groups in a plurality of rows arranged in the upstream-downstream direction, each of the tube groups comprising the plurality of heat exchange tubes arranged at a spacing, the refrigerant inlet header positioned toward one end of each of the heat exchange tubes and having joined thereto the heat exchange tubes of one tube group of at least one row, the refrigerant outlet header positioned toward said one end of each heat exchange tube and having joined thereto the heat exchange tubes of the other tube group, the refrigerant inflow intermediate header positioned toward the other end of each heat exchange tube and having jointed thereto the heat exchange tubes joined to the inlet header, and the refrigerant outflow intermediate header positioned toward said other end of each heat exchange tube and in the upstream side and having joined thereto the heat exchange tubes joined to the outlet header,

wherein the outflow intermediate header is provided in interior thereof with first flow dividing control means for causing a refrigerant to dividedly flow into the heat exchange tubes joined to the outflow intermediate header uniformly,

wherein the inlet header is provided in interior thereof with second flow dividing control means for causing the refrigerant to dividedly flow into the heat exchange tubes joined to the inlet header uniformly,

wherein the second flow dividing control means comprises a second flow dividing control wall having a plurality of refrigerant passing holes for dividing the interior of the inlet header into first and second two spaces arranged one above the other, the refrigerant inlet being in communication with the first space, and the heat exchange tubes joined to the inlet header communicate with the second space,

wherein the refrigerant passing holes formed in the second flow dividing control wall are arranged at a spacing longitudinally thereof and are smaller than the refrigerant passing holes in the first flow dividing control means.

Claim 18 (currently amended): A heat exchanger according to claim [[15]] 17 wherein the outlet header is provided in interior thereof with third flow dividing control means for causing the refrigerant to dividedly flow into the heat exchange tubes joined to the outlet header uniformly.

Claim 19 (original): A heat exchanger according to claim 18 wherein the third flow dividing control means comprises a third flow dividing control wall having refrigerant passing holes for dividing the interior of the outlet header into first and second two spaces arranged one above the other, the refrigerant outlet being in communication with the first space, and the heat exchange tubes joined to the outlet header communicate with the second space.

Claim 20 (currently amended): A heat exchanger according to claim [[16]] 17 wherein the inlet header and the outlet header are provided by dividing a refrigerant inlet-outlet tank into a front and a rear portion by separating means.

Claim 21 (original): A heat exchanger according to claim 20 wherein the inlet-outlet tank comprises a first member having the heat exchange tubes joined thereto, a second member brazed to the first member at a portion thereof opposite to the heat exchange tubes, and two closing members brazed to respective opposite ends of the first and second members, the second member being integrally provided with the separating means, the second flow dividing control wall, and a third flow dividing wall having refrigerant passing holes for dividing the interior of the outlet header into two spaces arranged one above the other.

Claim 22 (currently amended): A heat exchanger according to claim [[1]] 8 wherein the heat exchange tubes are flat and are arranged with ~~their~~ a width of the heat exchange

tubes pointing toward the ~~front-rear~~ upstream-downstream direction and are 0.75 to 1.5 mm in height [[i.e.,]] which is in [[the]] a thickness of the [[tube]] heat exchange tubes.

Claim 23 (currently amended): A heat exchanger according to claim 22 wherein a fin is disposed between each adjacent pair of heat exchange tubes and is a corrugated fin comprising crest portions, furrow portions and flat connecting portions each interconnecting the crest portion and the furrow portion, the fin being 7.0 to 10.0 mm in height[[, i.e.,]] which is in [[the]] a straight distance from the crest portion to the furrow portion and 1.3 to 1.7 mm in fin pin[[, i.e.,]] which is in [[the]] a pitch of the connecting portions.

Claim 24 (original): A heat exchanger according to claim 23 wherein the crest portion and the furrow portion of the corrugated fin each comprise a flat portion and a rounded portion provided at each of opposite sides of the flat portion and integral with the connecting portion, the rounded portion being up to 0.7 mm in radius of curvature.

Claim 25 (currently amended): A refrigeration cycle comprising a compressor, a condenser and an evaporator, the evaporator comprising a heat exchanger according to claim [[1]] 8.

Claim 26 (original): A vehicle having installed therein a refrigeration cycle according to claim 25 as an air conditioner.

Claim 27 (new): A heat exchanger according to claim 8 wherein the spacing between each adjacent pair of refrigerant passing holes gradually increases as the control wall extends away from said one end of the inflow intermediate header where the inflow intermediate header and the outflow intermediate header are held in communication.

Claim 28 (new): A heat exchanger according to claim 8 wherein respective adjacent pairs of refrigerant passing holes are equal in spacing.

Claim 29 (new): A heat exchanger according to claim 10 wherein the heat exchange tubes are flat and are arranged with a width of the heat exchange tubes pointing toward the

upstream-downstream direction and are 0.75 to 1.5 mm in height which is in a thickness of the heat exchange tubes.

Claim 30 (new): A heat exchanger according to claim 29 wherein a fin is disposed between each adjacent pair of heat exchange tubes and is a corrugated fin comprising crest portions, furrow portions and flat connecting portions each interconnecting the crest portion and the furrow portion, the fin being 7.0 to 10.0 mm in height which is in a straight distance from the crest portion to the furrow portion and 1.3 to 1.7 mm in fin pin which is in a pitch of the connecting portions.

Claim 31 (new): A heat exchanger according to claim 30 wherein the crest portion and the furrow portion of the corrugated fin each comprise a flat portion and a rounded portion provided at each of opposite sides of the flat portion and integral with the connecting portion, the rounded portion being up to 0.7 mm in radius of curvature.

Claim 32 (new): A refrigeration cycle comprising a compressor, a condenser and an evaporator, the evaporator comprising a heat exchanger according to claim 10.

Claim 33 (new): A vehicle having installed therein a refrigeration cycle according to claim 32 as an air conditioner.

Claim 34 (new): A heat exchanger according to claim 12 wherein the heat exchange tubes are flat and are arranged with a width of the heat exchange tubes pointing toward the upstream-downstream direction and are 0.75 to 1.5 mm in height which is in a thickness of the heat exchange tubes.

Claim 35 (new): A heat exchanger according to claim 34 wherein a fin is disposed between each adjacent pair of heat exchange tubes and is a corrugated fin comprising crest portions, furrow portions and flat connecting portions each interconnecting the crest portion and the furrow portion, the fin being 7.0 to 10.0 mm in height which is in a straight distance

from the crest portion to the furrow portion and 1.3 to 1.7 mm in fin pin which is in a pitch of the connecting portions.

Claim 36 (new): A heat exchanger according to claim 35 wherein the crest portion and the furrow portion of the corrugated fin each comprise a flat portion and a rounded portion provided at each of opposite sides of the flat portion and integral with the connecting portion, the rounded portion being up to 0.7 mm in radius of curvature.

Claim 37 (new): A refrigeration cycle comprising a compressor, a condenser and an evaporator, the evaporator comprising a heat exchanger according to claim 12.

Claim 38 (new): A vehicle having installed therein a refrigeration cycle according to claim 37 as an air conditioner.

Claim 39 (new): A heat exchanger according to claim 17 wherein the heat exchange tubes are flat and are arranged with a width of the heat exchange tubes pointing toward the upstream-downstream direction and are 0.75 to 1.5 mm in height which is in a thickness of the heat exchange tubes.

Claim 40 (new): A heat exchanger according to claim 39 wherein a fin is disposed between each adjacent pair of heat exchange tubes and is a corrugated fin comprising crest portions, furrow portions and flat connecting portions each interconnecting the crest portion and the furrow portion, the fin being 7.0 to 10.0 mm in height which is in a straight distance from the crest portion to the furrow portion and 1.3 to 1.7 mm in fin pin which is in a pitch of the connecting portions.

Claim 41 (new): A heat exchanger according to claim 40 wherein the crest portion and the furrow portion of the corrugated fin each comprise a flat portion and a rounded portion provided at each of opposite sides of the flat portion and integral with the connecting portion, the rounded portion being up to 0.7 mm in radius of curvature.

Claim 42 (new): A refrigeration cycle comprising a compressor, a condenser and an evaporator, the evaporator comprising a heat exchanger according to claim 17.

Claim 43 (new): A vehicle having installed therein a refrigeration cycle according to claim 42 as an air conditioner.